



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/671,226      | 09/24/2003  | Clifford C. Johnson  | JOHN-023            | 8210             |

7590 01/07/2005  
Michael S. Neustel  
Suite No.4  
2534 South University Drive  
Fargo, ND 58103

EXAMINER

NGUYEN, PHUNG

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2632

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/671,226 | <b>Applicant(s)</b><br>JOHNSON, CLIFFORD C. |  |
|                              | <b>Examiner</b><br>Phung T Nguyen    | <b>Art Unit</b><br>2632                     |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 20 is/are allowed.  
 6) ☒ Claim(s) 1,2,11 and 12 is/are rejected.  
 7) ☒ Claim(s) 3-10 and 13-19 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/27/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamoto et al. (U.S. Pat. 6,666,784) in view of Stevenson (U.S. Pat. 5,167,289).

**Regarding claim 1:** Iwamoto et al. disclose piston rod piston detector autotensioner and belt tension adjuster comprising a measurement unit attachable to a cylinder shaft of a hydraulic cylinder, wherein said measurement unit measures an extended position of a cylinder shaft (figure 1, col. 5, lines 6-17, col. 7, lines 42-45). Iwamoto et al. disclose a display unit (col. 15, lines 44-45) but do not teach a display unit with a plurality of display lights in communication with said measurement unit, wherein said display lights indicate an extended position of a cylinder shaft as claimed. However, Stevenson discloses air spring load monitoring system comprising a display unit with a plurality of display lights in communication with the measurement unit (figures 2 and 3, col. 5, lines 26-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Stevenson in the system of Iwamoto et al. because they both teach the monitoring system which includes a display unit. It is seen that Stevenson's teaching of a display unit with a plurality of display lights would enhance the system of Iwamoto et al. in order to prevent a mental calculation or other interpretation of alphanumeric data.

**Regarding claim 2:** Stevenson teaches an indicia adjacent each of said display lights indicating a position measurement (col. 5, lines 50-61). Plus the consideration of claim 1 above.

**Regarding claim 11:** All the claim subject matter is already discussed in respect to claim 1 above. Iwamoto et al. inherently teach the measurement unit 17 including the housing bracket (fig. 1, col. 5, lines 6-8).

**Regarding claim 12:** Refer to claim 2 above.

***Allowable Subject Matter***

3. Claims 3-10, and 13-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 20 is allowed.

The following is an examiner's statement of reasons for allowance:

Applicant has claimed uniquely distinct combination of features in the instant invention. The combination includes "a housing unit having a tubular structure; a plurality of contact members attached within said housing unit, wherein said contact members are electrically connected to said display lights; a measurement shaft slidably extending from within said housing unit and attachable to a cylinder shaft of a hydraulic cylinder; and a main contact attached to said measurement shaft that engages one or more of said contact members based upon a position of said measurement shaft". These features are not found or suggested in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Kurth [U.S. Pat. 6,321,781] discloses apparatus for monitoring the valve stroke of an electromagnetically actuated valve.

b. Zimmermann [U.S. Pat. 5,523,684] discloses electronic solenoid control apparatus and method with hall effect technology.

c. Kimura et al. [U.S. Pat. 6,442,862] disclose displacement measuring apparatus.

d. Katogi et al. [U.S. Pat. 4,752,771] disclose an electronic instrument panel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 571-272-2968. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Application/Control Number: 10/671,226  
Art Unit: 2632

Page 5

Phung Nguyen

A handwritten signature in black ink, appearing to read 'Phung Nguyen', with a long horizontal flourish extending to the right.

Date: December 27, 2004